BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK: Improvements CC Roads and CC Drains Works at Kattigenahalli in Ward No.5 Byatarayanapura Sub Division

Estimate Cost Rs. 9900000

Sl no.	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
1	Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum							
	For new Rcc drains								
	Drain kattiganahalli 1st main								
	From school to the (LHS)ambrish house		1	304.00	1.55	1.05	496.20		
	Ashwathappa house to main road		1	351.40	1.55	1.00	544.67		
	kattigenahalli lake road		1	83.00	1.60	1.33	176.89		
	culverts								
	Along school to the ambrish house (LHS)		1	4.00	2.10	1.25	10.50		
	Along school to the ambrish house (LHS)		1	5.80	2.10	1.25	15.23		
	Along school to the ambrish house (LHS)		1	6.60	2.10	1.25	17.33		
	Along school to the ambrish house (LHS)		1	6.00	2.10	1.25	15.75		
	Along school to the ambrish house (LHS)		1	7.00	2.10	1.25	18.38		
	Along school to the ambrish house (LHS)		1	5.90	2.10	1.25	15.49		
	Along school to the ambrish house (LHS)		1	7.80	2.10	1.25	20.48		
						Cum	1330.9	137.80	183397.23
	Basic Rate	130.00							
	Area Weightage @6%	7.80							
	Total	**137.80**							
2	Removing B S Slab of Drain and stacking 7.5MM Thick, and as per the directions of the Engineer-in-charge of the work .	Sqm							
	7th B kuvempu nagara								
	Babita Beauty Parlor Road Till #118 Anushri nilaya (L H S)		1	123.00	1.45		178.35		
	7th B kuvempu nagara								
	Babita Beauty Parlor Road Till #118 Anushri nilaya (R H S)		1	127.40	1.45		184.73		
						Sqm	**363.08**	**104.94**	**38101.62**
	Basic Rate	99.00							
	Area Weightage @6%	5.94							
	Total	**104.94**							
3	Refixing stone slabs of drains and pointing in C.M (1:3) and as per the directions of the Engineer-in-charge of the work .	Sqm							
	7th B kuvempu nagara								
	Babita Beauty Parlor Road Till #118 Anushri nilaya (L H S)		1	123.00	1.45		178.35		
	7th B kuvempu nagara								
	Babita Beauty Parlor Road Till #118 Anushri nilaya (R H S)		1	127.40	1.45		184.73		
						Sqm	**363.08**	**111.30**	**40410.80**
	Basic Rate	105.00							
	Area Weightage @6%	6.30							

Sl no.	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
	Total	**111.30**							
4	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar(1:6) including fixing curing etc and as per the directions of the Engineer-in-charge of the work .	Sqm							
	7th B kuvempu nagara								
	Babita Beauty Parlor Road Till #118 Anushri nilaya (L H S)		1	37.00	1.45		53.65		
	7th B kuvempu nagara								
	Babita Beauty Parlor Road Till #118 Anushri nilaya(R H S)		1	25.50	1.45		36.98		
						Sqm	**90.63**	**742.00**	**67243.75**
	Basic Rate	700.00							
	Area Weightage @6%	42.00							
	Total	**742.00**							
5	Construction of Rolled Cement Concrete mix 1:4:8 OPC cement @180kgs, with 25mm and down size graded granite metal coarse aggregate at 0.85cum and fine aggregates @0.57cum base course with coarse and fine aggregate conforming to IS:383, aggregate cement ratio 12:1 and minimum cement content of 180kg/ cum, aggregate gradation to be as per Table 600-4 after blending, mixing in batching plant at optimum moisture content, transporting to site, laying with a paver with electronic sensor, compacting with 8-10 tonnes smooth wheeled vibratory roller to achieve, the designed flexural strength, finishing and curing complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum							
	For new Rcc drains								
	Bottom concrete								
	Drain kattiganahalli 1st main								
	From school to the (LHS)ambrish house		1	304.00	1.40	0.15	63.84		
	Ashwathappa house to main road			351.40	1.40	0.15	73.79		
	kattigenahalli lake road		1	83.00	1.60	0.15	19.92		
	PCC FOR CULVERTS								
	Along school to the ambrish house (LHS)		1	4.00	2.00	0.15	1.20		
	Along school to the ambrish house (LHS)		1	5.80	2.00	0.15	1.74		
	Along school to the ambrish house (LHS)		1	6.60	2.00	0.15	1.98		
	Along school to the ambrish house (LHS)		1	6.00	2.00	0.15	1.80		
	Along school to the ambrish house (LHS)		1	7.00	2.00	0.15	2.10		
	Along school to the ambrish house (LHS)		1	5.90	2.00	0.15	1.77		
	Along school to the ambrish house (LHS)		1	7.80	2.00	0.15	2.34		
	ROAD PCC								
	Cross road		1	53.30	2.60	0.15	20.79		
	Cross road		1	31.70	2.60	0.15	12.36		
						Cum	**203.63**	**3606.12**	**734311.49**
	Basic Rate	3402.00							
	Area Weightage @6%	204.12							
	Total	**3606.12**							

Sl no.	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
6	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum							
	SSM for culverts								
	Along school to the ambrish house (LHS)		2	4.00	0.60	0.50	2.40		
	Along school to the ambrish house (LHS)		2	5.80	0.60	0.50	3.48		
	Along school to the ambrish house (LHS)		2	6.60	0.60	0.50	3.96		
	Along school to the ambrish house (LHS)		2	6.00	0.60	0.50	3.60		
	Along school to the ambrish house (LHS)		2	7.00	0.60	0.50	4.20		
	Along school to the ambrish house (LHS)		2	5.90	0.60	0.50	3.54		
	Along school to the ambrish house (LHS)		2	7.80	0.60	0.50	4.68		
							25.86	**4871.76**	**125983.71**
	Basic Rate	4596.00							
	Area Weightage @6%	275.76							
	Total	**4871.76**							
7	Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum							
	SSM for culverts								
	Along school to the ambrish house (LHS)		2	4.00	0.50	0.45	1.80		
	Along school to the ambrish house (LHS)		2	5.80	0.50	0.45	2.61		
	Along school to the ambrish house (LHS)		2	6.60	0.50	0.45	2.97		
	Along school to the ambrish house (LHS)		2	6.00	0.50	0.45	2.70		
	Along school to the ambrish house (LHS)		2	7.00	0.50	0.45	3.15		
	Along school to the ambrish house (LHS)		2	5.90	0.50	0.45	2.66		
	Along school to the ambrish house (LHS)		2	7.80	0.50	0.45	3.51		
						Cum	**19.40**	**5305.30**	**102896.29**
	Basic Rate	5005.00							
	Area Weightage @6%	300.30							
	Total	**5305.30**							
8	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specifications.and as per the directions of the Engineer-in-charge of the work .	Sqm							
	SHUTTERING								
	Drain kattiganahalli 1st main								
	From school to the (LHS)ambrish house		4	304.00		0.79	954.56		
	Ashwathappa house to main road		4	351.40		0.60	836.33		
	kattigenahalli lake road		4	83.00		1.00	331.34		
						Sqm	**2122.23**	**309.52**	**656872.01**
	Basic Rate	292.00							
	Area Weightage @6%	17.52							
	Total	**309.52**							

Sl no.	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
9	Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum							
	SSM Coping concrete								
	Along school to the ambrish house (LHS)		2	4	0.5	0.15	0.6		
	Along school to the ambrish house (LHS)		2	5.80	0.50	0.15	0.87		
	Along school to the ambrish house (LHS)		2	6.60	0.50	0.15	0.99		
	Along school to the ambrish house (LHS)		2	6.00	0.50	0.15	0.90		
	Along school to the ambrish house (LHS)		2	7.00	0.50	0.15	1.05		
	Along school to the ambrish house (LHS)		2	5.90	0.50	0.15	0.89		
	Along school to the ambrish house (LHS)		2	7.80	0.50	0.15	1.17		
	Vent bed								
	Along school to the ambrish house (LHS)		1	4.00	0.50	0.20	0.40		
	Along school to the ambrish house (LHS)		1	5.80	0.50	0.20	0.58		
	Along school to the ambrish house (LHS)		1	6.60	0.50	0.20	0.66		
	Along school to the ambrish house (LHS)		1	6.00	0.50	0.20	0.60		
	Along school to the ambrish house (LHS)		1	7.00	0.50	0.20	0.70		
	Along school to the ambrish house (LHS)		1	5.90	0.50	0.20	0.59		
	Along school to the ambrish house (LHS)		1	7.80	0.50	0.20	0.78		
	Culvert Ramp								
	Along school to the ambrish house (LHS)		2	5.80	0.45	0.20	1.04		
	Along school to the ambrish house (LHS)		2	6.60	0.45	0.20	1.19		
	Along school to the ambrish house (LHS)		2	6.00	0.45	0.20	1.08		
	Along school to the ambrish house (LHS)		2	7.00	0.45	0.20	1.26		
	Along school to the ambrish house (LHS)		2	5.90	0.45	0.20	1.06		
	School Front Ramp		2	5.00	0.60	0.23	1.38		
						Cum	**17.79**	**5627.54**	**100108.31**
	Basic Rate	5309.00							
	Area Weightage @6%	318.54							
	Total	**5627.54**							
10	Providing Flush pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.and as per the directions of the Engineer-in-charge of the work .	Sqm							
	Pointing for SSm Culvert								
	Along school to the ambrish house (LHS)		2	4.00		0.75	6.00		
	Along school to the ambrish house (LHS)		2	5.80		0.75	8.70		
	Along school to the ambrish house (LHS)		2	6.60		0.75	9.90		
	Along school to the ambrish house (LHS)		2	6.00		0.75	9.00		
	Along school to the ambrish house (LHS)		2	7.00		0.75	10.50		
	Along school to the ambrish house (LHS)		2	5.90		0.75	8.85		
	Along school to the ambrish house (LHS)		2	7.80		0.75	11.70		
						Cum	**64.65**	**223.66**	**14459.62**
	Basic Rate	211.00							
	Area Weightage @6%	12.66							
	Total	**223.66**							

Sl no.	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
11	Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.875 cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. and as per the directions of the Engineer-in-charge of the work .	Cum							
	For new Rcc drains								
	bottom concrete								
	Drain kattiganahalli 1st main								
	From school to the (LHS)ambrish house		1	304.00	1.1	0.15	50.12		
	RHS Ashwathappa house to main road		1	351.40	1.1	0.15	59.56		
	kattigenahalli lake road		1	83.00	1.30	0.15	16.19		
	side wall								
	Drain kattiganahalli 1st main								
	From school to the (LHS)ambrish house		2	304.00	0.15	0.8	73.87		
	Ashwathappa house to main road		2	351.40	0.15	0.6	64.83		
	kattigenahalli lake road		2	83.00	0.20	1.10	36.52		
	Drain side Filling								
	Drain kattiganahalli 1st main								
	From school to the (LHS)ambrish house		1	304.00	0.15	0.15	6.84		
	Ashwathappa house to main road		1	351.40	0.15	0.15	7.91		
	kattigenahalli lake road		1	83.00	0.15	0.15	1.87		
						Cum	**317.70**	**5998.54**	**1905748.72**
	Basic Rate	5659.00							
	Area Weightage @6%	339.54							
	Total	**5998.54**							
12	Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Tonne							
	for Drain 65 kg			317.70	0.065		22.58		
						Tonne	**22.58**	**75223.96**	**1698632.24**
	Basic Rate	#######							
	Area Weightage @6%	4257.96							
	Total	#######							

Sl no.	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
13	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Which includes cost of gravel/murrum, watering charges & compaction by vibratory roller) and as per the directions of the Engineer-in-charge of the work .	Cum							
	Drain side Filling								
	Drain kattiganahalli 1st main								
	From school to the (LHS)ambrish house		1	304.00	0.15	0.45	20.52		
	Ashwathappa house to main road		1	351.40	0.15	0.45	23.72		
	kattigenahalli lake road		1	83.00	0.15	0.45	5.60		
							49.84	**344.50**	**17170.57**
	Basic Rate	325.00							
	Area Weightage @6%	19.50							
	Total	**344.50**							
14	Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.								
	Drain side Filling								
	Drain kattiganahalli 1st main								
	From school to the (LHS)ambrish house		1	304.00	0.15	0.30	13.68		
	Ashwathappa house to main road			351.40	0.15	0.30	15.81		
	kattigenahalli lake road		1	83.00	0.15	0.30	3.74		
							33.23	**2001.28**	**66498.53**
	Basic Rate	1888.00							
	Area Weightage @6%	113.28							
	Total	**2001.28**							
15	Cement Concrete Pavement, construction unreinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with 43 grade cement or any other type as per clause 1051.2.2M20/M30 at 380/450 kg per cum, coarse and fine aggregate conforming to IS: 383, maximum size of coarse aggregate not exceeding 25mm, mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing side of 125 micron thick	Cum							
	Cross Road		1	53.30	2.75	0.15	21.69		
	Cross Road			31.70	2.41	0.15	11.46		
							Cum **33.15**	**5210.96**	**172743.32**
	Basic Rate	4916.0							
	Area Weightage @6%	295							
	Total	**5210.96**							

Sl no.	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
16	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift complete as per specifications and directions of Engineer in charge of work.	sqm							
	Cross Road		1	53.30	2.76		147.00		
	Cross Road		1	31.70	2.34		74.05		
						sqm	**221.05**	**72.08**	**15933.09**
	Basic Rate	68.00							
	Area Weightage @6%	4.08							
	Total	**72.08**							
17	Precast slab 20mm and down size for slab (including steel reinforcement) including centring and shuttering machine mixed concrete laid in layers not exceeding 15cms thick well compacted cost of all materials labour HOM of machineries curing complete as per specifications C : C 1:1.5:3 Including all cost of material (DATA RATE ENCLOSED) 10cm thick RCC pre cast slab. and as per the directions of the Engineer-in-charge of the work .	Sqm							
	PRE CAST SLAB								
	From school to the (LHS)ambrish house		1	304.00	1.00		303.39		
	Ashwathappa house to main road		1	351.40	0.90		314.50		
	kattigenahalli lake road			83.00	1.5		123.75		
						Sqm	**741.51**	**2337.00**	**1732908.87**
	data rate	2337.00							
18	Providing and installing at site of work 63mm (0.662) PVC Pipes of 6 kg / cm2 including cost of pipes and specials and labour, including lowering into trenches, laying true to line, level and perfect linking at joints leak proof including jointing of approved type with all labour and lift charges, handling charges including encasing the pipe alround to a depth not less than 15cms with gravel or selected earth available from the excavation etc., complete and as per the directions of the Engineer-in-charge of the work .	Mtr							
			1	179.00			179.00		
						Mtr	**179.00**	**394.32**	**70583.28**
	Basic Rate	372.00							
	Area Weightage @6%	22.32							
	Total	**394.32**							
19	Laying Reinforced cement concrete pipe NP2/ Prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement martar 1:2 but excluding excavation, protection works, backfilling and masonry works in head walls and parapet complete as per specifications. and as per the directions of the Engineer-in-charge of the work .	Mtr							
			8	2.50			20.00		
						Mtr	**20.00**	**5976.28**	**119525.60**
	Basic Rate	5638.00							
	Area Weightage @6%	338.28							

Sl no.	Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
	Total	**5976.28**							
20	Providing 100mm and down nominal size and as per the directions of the Engineer-in-charge of the work .	Cum							
			8	0.28		0.60	1.34		
						Cum	**1.34**	**987.62**	**1327.36**
21	Providing 40mm and down nominal size and as per the directions of the Engineer-in-charge of the work .								
		Cum	8	0.28		0.40	0.90		
						Cum	**0.90**	**1091.43**	**977.92**
22	Providing 20mm and down nominal size and as per the directions of the Engineer-in-charge of the work .								
	For Pit (Area-3.14xD2/4)	Cum	8	0.28		0.40	0.90		
						Cum	**0.90**	**1091.43**	**977.92**
23	Providing fine aggregate 2.36 nominal size and as per the directions of the Engineer-in-charge of the work .								
	For Pit (Area-3.14xD2/4)	Cum	8	0.28		0.30	0.67		
						Cum	**0.67**	**1054.29**	**708.48**
24	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete. and as per the directions of the Engineer-in-charge of the work .								
	Culvert cover slab								
	Along school to the ambrish house (LHS)	Sqm	1	4.00	1.50		6.00		
	Along school to the ambrish house (LHS)	Sqm	1	5.80	1.50		8.70		
	Along school to the ambrish house (LHS)	Sqm	1	6.60	1.50		9.90		
	Along school to the ambrish house (LHS)	Sqm	1	6.00	1.50		9.00		
	Along school to the ambrish house (LHS)	Sqm	1	7.00	1.50		10.50		
	Along school to the ambrish house (LHS)	Sqm	1	5.90	1.50		8.85		
	Along school to the ambrish house (LHS)	Sqm	1	7.80	1.50		11.70		
	Near Maramma temple	Sqm	1	8.00	1.50		12.00		
	data rate	**5418.00**					**76.65**	**5418.00**	**415289.70**
25	Loading and Unloading of stone boulders by manual means complete as per specificatiion and as per the directions of the Engineer-in-charge of the work .	Cum							
			Quantity vide item No-1						
						Cum	**1330.89**	**60.42**	**80412.63**
	Basic Rate	57.00							

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
Area Weightage @ 6%	3.42							
Total	**60.42**							8363223.08
						Grand Total		**8460723.00**
For 12% Applicable GST							1003586.77	1015287.00
For 4% KRIDL Charges							334528.92	338429.00
For 1% DPR Charges & 1% PMC Charges							198000=00	84607.23
Miscesallaneous Charges	L/S						661=00	953.77
								9900000.00

Note:

The work spot has been inspected and the work is found necessary.
This estimate is prepared as per PWD SR of 2018-19
This Estimate Grant under SC-SP/TSP Mukyamantrigala Nava Bengaluru Yojane
The provisions were made in this estimate are necessary and adequate.
This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 05(Jakkur)

Assistant Executive Engineer
Project Yelahanka
15/10/2019

Executive Engineer
Bruhat Bangalore Mahanagara Palike
22/x/19

Administrative Approval

Accorded For 25.99.00 Lakhs only
Head of A/C P-3727
CER NO :22 Dt:04/11/2019

E.E. (Project) 6/11/19

Technical Sanction

Accorded For R.S 99.00 Lacs only
Head of A/C P3727
CER NO :156 Dt:6.11.2019

TA CE (YNK)